



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,606	03/31/2004	Wang Yuch	42P18695	9672

8791 7590 04/05/2006

BLAKELY SOKOLOFF TAYLOR & ZAFMAN  
12400 WILSHIRE BOULEVARD  
SEVENTH FLOOR  
LOS ANGELES, CA 90025-1030

EXAMINER
----------

GILLIAM, BARBARA LEE

ART UNIT	PAPER NUMBER
----------	--------------

1752

DATE MAILED: 04/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/815,606

Applicant(s)

YUEH ET AL.

Examiner

Barbara L. Gilliam

Art Unit

1752

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 and 31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16-20 and 31 is/are allowed.
- 6) ☒ Claim(s) 1-6 and 11-15 is/are rejected.
- 7) ☒ Claim(s) 7-10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/18/2005</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. The amendment filed January 18, 2006 has been received and fully considered.
2. Claims 1-20 and 31 are present. Claims 21-30 were canceled.

### ***Election/Restrictions***

3. Claims 1-15 were withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected inventions, however in light of the amendment to claim 1, claims 1-15 are rejoined with elected claims 16-20 and 31.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

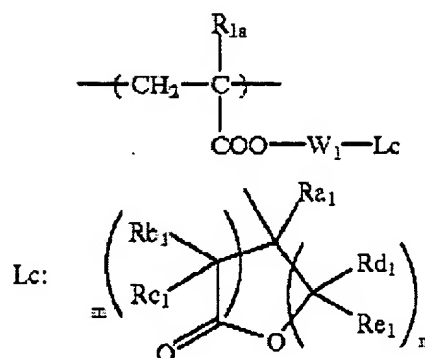
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-6, 11-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Fujimori et al., US 2002/0155383 A1.

- a. The positive resist composition of Fujimori et al. comprises a resin having an aliphatic cyclic hydrocarbon group and increasing solubility to an alkali developer by the action of an acid, a compound generating an acid upon irradiation with an actinic ray or radiation and a specific nitrogen-containing compound (abstract). The resin comprises a repeating unit having the lactone structure, represented by formula (IV):

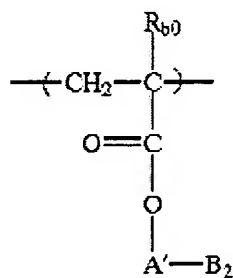
Art Unit: 1752

(IV)



wherein W<sub>1</sub> can be a carbonyl group ([0029]-[0030]; [0104]-[0106]). The resin can also comprise repeating groups of formula AI:

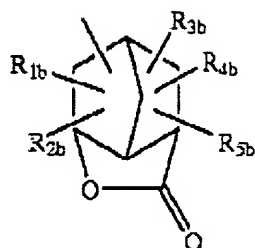
(AI)



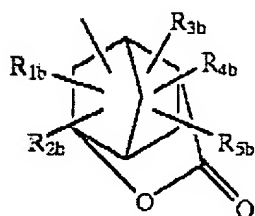
wherein A' can be a carbonyl group and B<sub>2</sub> represents a group shown by one of formulae (V-1) to (V-4):

Art Unit: 1752

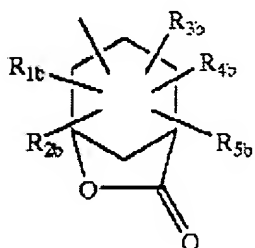
(V-1)



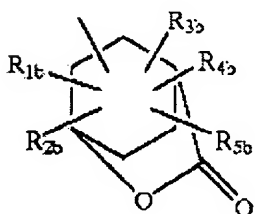
(V-2)



(V-3)

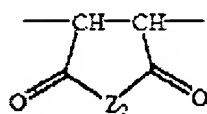


(V-4)



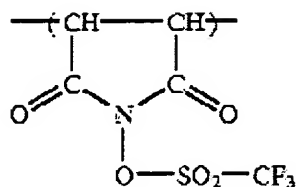
([0117]-[0130]). The resin can further contain the repeating unit of formula (VIII)

(VIII)

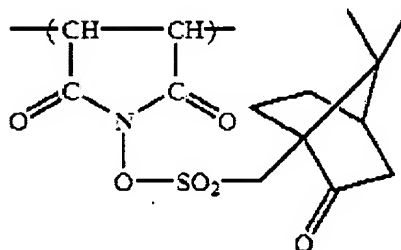


Specific examples of the repeating unit of formula (VIII) include:

[I'-6]



[I'-7]



([0152]-[0158]).

### ***Response to Arguments***

6. Applicant's arguments filed January 18, 2006 have been fully considered but they are not persuasive.

Applicant's arguments, see pages 6-10, filed January 18, 2006, with respect to the rejections of claims 16-and 31 under 35 USC 102(b) and 35 USC 103(a) over Okino et al. (US 6,303,266 B1) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. See also Okino et al. col. 13, lines 50-55. However, upon further consideration, a new ground(s) of rejection is made in view of Fujimori et al., US 2002/0155383 A1.

***Allowable Subject Matter***

7. Claims 7-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
8. Claims 16-20 and 31 are allowed.
9. The following is a statement of reasons for the indication of allowable subject matter: Neither Okino et al. (6,303,26 B1) nor Fujimori et al. (US 2002/0155383 A1) teach the required polymer.

***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
  - a. In US 2003/0077540 A1, Kodama et al. teach a positive photosensitive composition.
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara L. Gilliam whose telephone number is 571-272-1330. The examiner can normally be reached on Monday through Thursday, 8:00 AM - 5:30 PM.
  - a. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1752

b. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Barbara L. Gilliam  
Primary Examiner  
Art Unit 1752

bg  
March 23, 2006